# Social Science in the 21<sup>st</sup> Century: Social Media and Politics

Joshua A. Tucker

Professor of Politics

Co-Director, NYU Center for Social Media and Politics

Director, Jordan Center for the Advanced Study of Russia

joshua.tucker@nyu.edu; @j\_a\_tucker





### New Questions: Social Media and Politics

- Political polarization
- Political participation
- Confidence in democratic institutions
- Echo chambers/filter bubbles
- Foreign influence campaigns
- Online harms
- Identifying the veracity of news
- Algorithms & political extremism ("rabbit holes")

### New Data, New Methods

- Driven by massive increases in computing power
- Data
  - Enormous datasets from digital trace data
  - Linked data: surveys, digital trace data, administrative data
- Methods
  - Text/Images as data
  - Machine learning
  - AI Large language models (LLMs) Chatbots

## Conventional Wisdom vs. Social Science Research

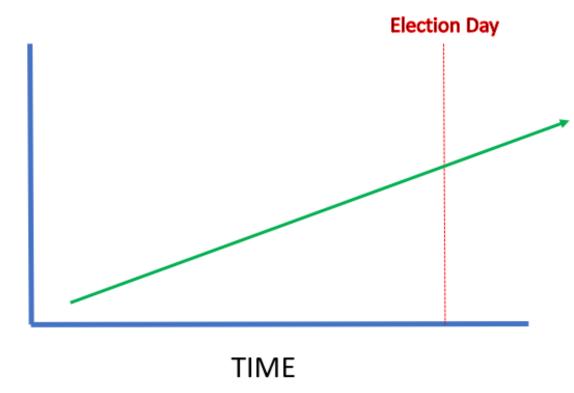
### What We Think We Know is Not Always the Case I: Hate Speech and the 2016 Election

#### **Conventional Wisdom**

POLITICS SPECIAL REPORTS | Mon Nov 7, 2016 | 10:46pm EST

Hate speech seeps into U.S. mainstream amid bitter campaign





'Massive rise' in hate speech on Twitter during presidential election

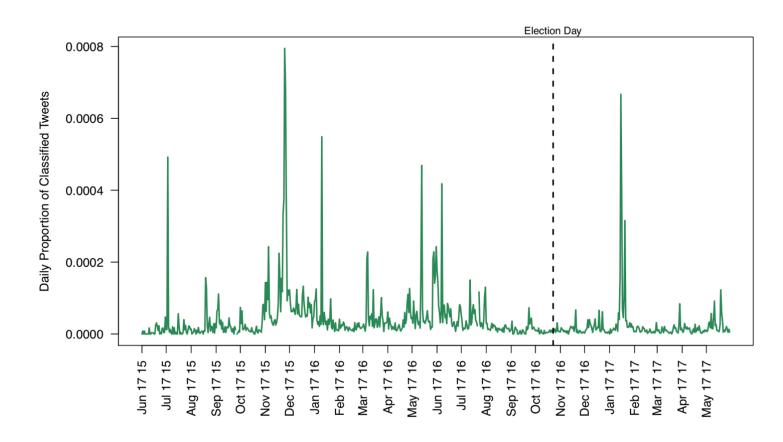
Jessica Guynn , USA TODAY Published 5:00 p.m. ET Oct. 21, 2016 | Updated 7:00 p.m. ET Oct. 23, 2016

### What We Think We Know is Not Always the Case I: Hate Speech and the 2016 Election

# Social Science Research on 1.2 Billion Tweets over two years:

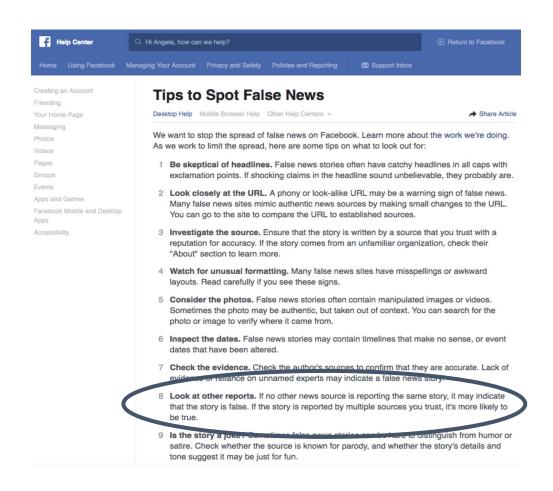
Hate speech is bursty, but was not increasing over time from 2015-17





### What We Think We Know is Not Always the Case II: Do Your Own Research

Conventional Wisdom: Search for more information

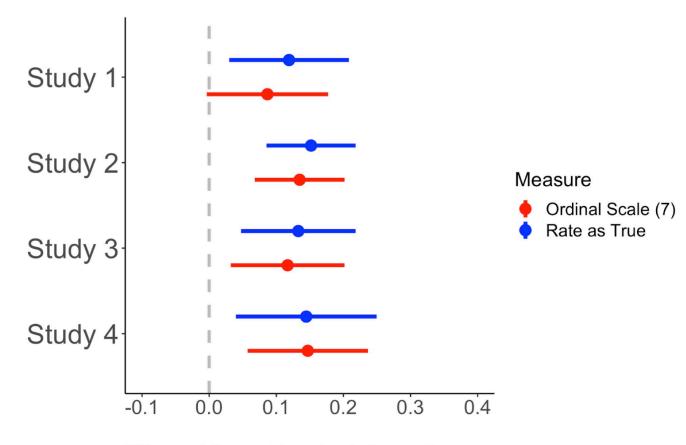


#### FAKE NEWS EDITION Big red flags for fake news: ALL CAPS, or obviously photoshopped pics. 2. A glut of pop-ups and banner ads? Good sign the story is pure clickbait. 3. Check the domain! Fake sites often add ".co" to trusted brands to steal their luster. (Think: "abcnews.com.co") 4. If you land on an unknown site, check its "About" page. Then, Google it with the word "fake" and see what comes up. 5. If a story offers links, follow thom, (Carbana loads to worse narbane.) No links. quotes, or references? Another telltale sign. 6. Verify an unlikely story by finding a reputable outlet reporting the same thing. Chack the date. Social media often resurrects outdated stories 8. Read past headlines. Often they bear no resemblance to what lies beneath. 9. Photos may be misidentified and dated. Use a reverse image search engine like TinEve to see where an image really comes from. 10. Gut check. If a story makes you angry, it's probably designed that way. 11. Finally, if you're not sure it's true, don't share it! Don't. Share. It.

What We Think We Know is Not Always the Case II: Do Your Own Research

Social Science Research:

Searching for information online makes people more likely to believe false news is true



Effect of Searching for Information on Perceived Veracity of Misinformation (1 unit is 1 standard deviation of that measure in the control group)

### What We Think We Know is Not Always the Case III: YouTube's Algorithm

#### THE WALL STREET JOURNAL.

How YouTube Drives People to the Internet's Darkest

**Tech** Markets Opinion Life & Arts

Conventional wisdom: Algorithm leads to extremist content

Ideology

Ņ

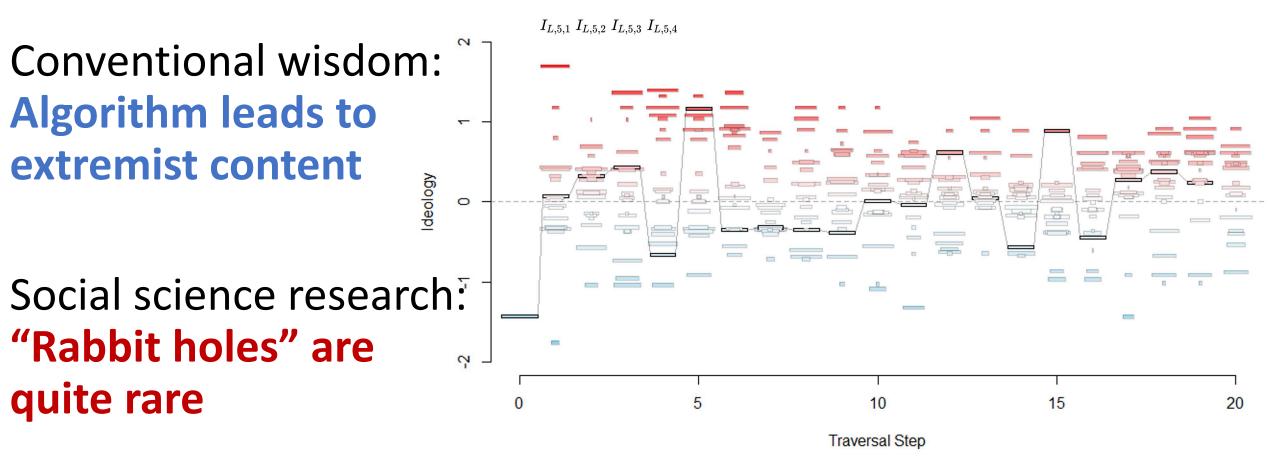
designed to fix the problem

Traversal Step

**Corners** 

Google's video site often recommends divisive of What Happened After My 13-Year-Old Son Joined the Alt-Right

### What We Think We Know is Not Always the Case III: YouTube's Algorithm



### Social Media and Politics: The Challenges

- 21<sup>st</sup> Century Social Science  $\rightarrow$  Lab Based Social Science
  - But the funding structures are not there

#### Data

- "Owned" by private actors → very different from previous generations of social science research
- Social media research → data access ultimately at the whim of the platforms